

Masthead Logo

**The Qualitative Report**

Volume 24 | Number 13

Article 4

4-14-2019

# “Listen to Your Gut”: A Reflexive Approach to Data Analysis

Nicole Brown

University College London - Institute of Education, [nicole.brown@ucl.ac.uk](mailto:nicole.brown@ucl.ac.uk)

Follow this and additional works at: <https://nsuworks.nova.edu/tqr>

Part of the [Quantitative, Qualitative, Comparative, and Historical Methodologies Commons](#), and the [Social Statistics Commons](#)

## Recommended APA Citation

Brown, N. (2019). “Listen to Your Gut”: A Reflexive Approach to Data Analysis. *The Qualitative Report*, 24(13), 31-43. Retrieved from <https://nsuworks.nova.edu/tqr/vol24/iss13/4>

This Article is brought to you for free and open access by the The Qualitative Report at NSUWorks. It has been accepted for inclusion in The Qualitative Report by an authorized administrator of NSUWorks. For more information, please contact [nsuworks@nova.edu](mailto:nsuworks@nova.edu).

## “Listen to Your Gut”: A Reflexive Approach to Data Analysis

### Abstract

Over the last two decades qualitative research has seen significant shifts towards the narrative, reflexive and creative. And yet, analytical frameworks do not seem to have stayed abreast of these developments. Using research into the construction of identity under the influence of fibromyalgia as an example, this paper seeks to exemplify a reflexive approach to data analysis that accounts for the researcher’s positionality as well as the increasingly untraditional, unconventional data stemming from creative data collection methods. The paper provides insight into data analysis and reflexivity and offers two practical examples of reflexive data analysis—an illustrated poem and an installation. After an outline of the processes and practical steps involved in the creation of these analytical outcomes, the paper concludes with thoughts relating to challenges, potential areas of application and a look to the future of this innovative approach to data analysis. In this approach, data analysis is in itself a form of knowledge generation through the process of assemblage and “listening to gut feelings.” This approach may be seen as unscientific, but given its advantages in relation to new insights, dissemination and communication of ideas, this approach is more fruitful than detrimental to developing qualitative research further.

### Keywords

Reflexivity, Reflective Practice, Reflexive Data Analysis, Creative Data Collection Methods, Qualitative Research, Messy Data, Arts-Based Research Practice

### Creative Commons License



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

## **“Listen to Your Gut”: A Reflexive Approach to Data Analysis**

Nicole Brown

University of Kent, Canterbury, New Zealand  
UCL Institute of Education, London, United Kingdom

---

*Over the last two decades qualitative research has seen significant shifts towards the narrative, reflexive and creative. And yet, analytical frameworks do not seem to have stayed abreast of these developments. Using research into the construction of identity under the influence of fibromyalgia as an example, this paper seeks to exemplify a reflexive approach to data analysis that accounts for the researcher’s positionality as well as the increasingly untraditional, unconventional data stemming from creative data collection methods. The paper provides insight into data analysis and reflexivity and offers two practical examples of reflexive data analysis—an illustrated poem and an installation. After an outline of the processes and practical steps involved in the creation of these analytical outcomes, the paper concludes with thoughts relating to challenges, potential areas of application and a look to the future of this innovative approach to data analysis. In this approach, data analysis is in itself a form of knowledge generation through the process of assemblage and “listening to gut feelings.” This approach may be seen as unscientific, but given its advantages in relation to new insights, dissemination and communication of ideas, this approach is more fruitful than detrimental to developing qualitative research further. Keywords: Reflexivity, Reflective Practice, Reflexive Data Analysis, Creative Data Collection Methods, Qualitative Research, Messy Data, Arts-Based Research Practice*

---

Over the last decades qualitative research has seen many changes, which have been described as the narrative turn (Atkinson, 1997), the reflexive turn (Foley, 2002), the relational turn (Gunzenhauser, 2006), and more recently the creative turn (Kara, 2015). These developments have occurred in response to researchers’ increased understanding and awareness of the research process as a daunting experience shaped by the power and authority differentials between the researcher and the researched. In order to level that playing field, a more reflexive approach to research tends to be combined with participatory elements within the data collection stage (Nind & Vinha, 2016; Tarr et al., 2018). Additionally, creative methods such as those based on arts activities (Bagnoli, 2009), the use of visual materials (Mason & Davies, 2009) or photo-elicitation (Orr & Phoenix, 2015) are used to render interviews less daunting for research participants, and thus this fosters an environment that is conducive to more relaxed conversations and to obtain rich data. However, for many of such studies the arts-based approach is not employed intentionally and consciously, but more as a tentative attempt to redress ethical concerns around the researcher-participant relationship. In turn, the focus does not lie on the participants’ creations as a form of data but on the participants’ contributions to interviews and surveys.

Whilst the trend of using alternative and multimodal forms of communication (Jewitt, Bezemer, & O’Halloran, 2016) is certainly to be welcomed, there is a neglect within the qualitative research community that I seek to address: the participants’ output or creation is not used for analytical purposes. Occasionally, photographs or sketches are included within research reports and articles to illustrate the textual analyses of interview transcripts. However, the actual creation is not considered as data and therefore not analyzed accordingly. With this

paper I offer an innovative approach to data analysis, thereby advancing the current discourses of arts-based research and performative, embodied approaches to data analysis.

I will commence this paper with a brief background to my research into the construction of identity under the influence of fibromyalgia to set the scene for the forms and formats of data I receive as multimodal forms of communication from my research participants. After a brief consideration of the data analysis and reflexivity within the context of analysis, I will highlight how the innovative, creative, reflexive approach to data analysis offers a relevant framework for dealing with untraditional, unconventional, “messy” data to such an extent that researchers gain new insights, whilst developing new modes for dissemination and public engagement at the same time. I finish this paper with the consideration of challenges and potential pitfalls as well as questions for future developments around creative research methods.

### **Research Context**

This paper reports on research into the construction of identity under the influence of fibromyalgia. As the research has been reported on elsewhere (Brown, 2017, 2018a, 2018b), and the focus of this paper relates to methodological concerns with “messy” data, I will only provide a short overview of and background to the research.

Fibromyalgia is a complex condition that is characterized by persistent wide-spread pain, cognitive dysfunctions, psychological disorders, fatigue and sleep disturbances (White & Harth, 2001). Typically, the fibromyalgia symptoms vary in form and severity over the course of days or even hours. Currently, there is no definitive test for fibromyalgia, so that diagnosis is through the exclusion of related conditions. This makes fibromyalgia a contested condition (Ehrlich, 2003; Wolfe, 2009) even amongst the medical professionals.

Existing research into fibromyalgia focusses heavily on identifying causes (Yunus, 2008, 2009) and improving medical understanding of the condition (Cording, Moore, Derry, & Wiffen, 2015) or on the lived experiences within the specific context of disability (Henriksson & Liedberg, 2000; Henriksson, Liedberg, & Gerdle, 2005), relationships (Armentor, 2017) or work-life balance and quality of life (Fletcher, Booth, & Ryan, 2015). To this end, the physical and emotional experiences of fibromyalgia are separated in line with the Cartesian dualism of body and mind. In particular in the context of psycho-somatic conditions, of which fibromyalgia is one, this distinction between body and mind is not helpful. Such a distinction ignores the interconnectedness of the physical symptoms causing psychological stresses and emotional tensions being expressed as physical experiences such as pain.

Additionally, the constant fluctuation of fibromyalgia results in symptoms that are difficult to describe as physical or emotional, as they are both combined. Research into the lived experience of fibromyalgia therefore requires an approach that transcends this Cartesian dualism. To an extent, this is why there have been calls for a research design using the narrative approach (McMahon, Murray, & Simpson, 2012; Sallinen, Kukkurainen, & Peltokallio, 2011). In practice, the application of narratives remains symptom-specific (Vincent, Whipple, & Rhudy, 2016), thus not accounting for the range and variability of fibromyalgia symptoms, which means that the lived experience of fibromyalgia is not viewed holistically. Additionally, aspects of the lived experience of fibromyalgia are difficult to capture and express in words, as language is too imprecise (Eccleston, 2016; Scarry, 1985; Sontag, 2003).

For these reasons, the exploration of how fibromyalgia shapes identity was designed using creative methods, so that research participants would be able to provide a wide range of forms and formats for their communication. As part of the research project, participants were asked to provide a timeline of their career trajectory and a timeline of their journey to diagnosis. Additionally, over the course of several weeks, participants created an identity box. To this

end, participants were provided with a question and in response participants had to identify an object that would represent their answer to place into their box. After five questions, the box was full of objects representing a variety of aspects of life with fibromyalgia. Throughout the identity box project, participants would email me photographs of and brief statements about their chosen objects. In order to fully engage participants in the meaning-making processes, we would then schedule a video-call in order to talk about the objects in greater detail. These conversations were held as conversations and exchanges of views between the researcher and the participants (Brinkmann & Kvale, 2015).

As a result, the raw data I have gathered over time takes the form of written communications such as essays, poems and emails, video-recorded conversations and their transcripts, photographs and photo collages, physical objects, song lists, and sketches. And this brings me to the crux of the matter: the data and its analysis. Within literary disciplines, for example, poetry would indeed be analyzed for its own merit and value; as would the songs within music research or the photographs within art-based disciplines. However, within the broader discourse of qualitative research this kind of data would be used as a stimulus for interviews, but not valued for its richness and meaning in itself.

Typically, analysis would be approached through coding data, which would then lead to the generation of themes and combined with relevant theoretical frameworks would result in conclusions. Under the cloak of providing objective, robust, valid interpretations commonly used approaches are Grounded Theory, Narrative Analysis, Thematic Analysis, Content Analysis, Discourse Analysis, Comparative Analysis, or some amalgamated form of those. But what if we took a different approach? What if we acknowledged that the themes “emerging” from our data are actually shaped and even generated by our own thoughts, values and beliefs? And what if, as a consequence, we were open to using all kinds of data—transcripts, songs, poetry, sketches and photographs—for what they are: the meaning we attribute to them?

### **What Is Data Analysis?**

The basic principle of research is for the researcher to explore or investigate, to gather data, which is then analyzed in order to be able to prove or disprove the initial hypothesis and answer the question initially posed. In handbooks for qualitative research, data analysis is described as a process, whereby data are coded and themes are generated (Saldaña, 2016). The development of themes through computer-assisted coding is so commonly applied and widely accepted, that developing researchers are actually encouraged to identify and apply an analytical framework in order to ensure reliability, validity and objectivity (Silverman, 2013). In many instances, these frameworks are then employed like step-by-step instruction guides without any consideration of the thought processes involved. And yet, this very stage of coding, identifying categories and developing themes does not occur or happen, it is a process of conscious meaning-making and generation of knowledge. Indeed, despite researchers’ attempts to bracket (Husserl, 1960) or bridle (Dahlberg, Dahlberg, & Nyström, 2011) previous ideas, assumptions and beliefs, no data analysis can ever happen in a vacuum.

Researchers are consistently influenced, affected and shaped by conversations, scholarly exchanges, texts and reading (Atkinson, 1997), and actually should follow up on such experiences and thoughts in order to be able to depict and analyze life in its multiplicity (Atkinson, 2017). In the more recent discourses around data analysis, there is an emergent recognition of data analysis as an interpretative process (Atkinson, 2017; Saldaña & Omasta, 2017). Qualitative data analysis is gradually becoming seen as the researchers’ attempt to make sense of data and draw conclusions to be more generally applicable within society. In dealing with data, coding it and generating wider themes, the researchers reduce, exclude or include and elaborate on data, which is very much a subjective choice. To take this a step further, the

analytical process is the researcher's interpretation, which is shaped by the researcher's views and assumptions.

Data analysis and the generation of themes therefore are not merely happening but are formally constructed to make meaning and sense of data (Morgan, 2018). If this is the case, why then is there reticence and reluctance in recognizing the wide range of data available to us? Why do researchers continue to focus on interview transcripts and the explanations of participants? If we are therefore looking to recognize intrinsic value in the data in whichever form it is presented to us, then surely as researchers we need to be more acutely aware of our position, roles and responsibilities. This then means that the analytical process needs to become more reflexive.

In the following section, I will consider reflexivity within data analysis in more generic terms before returning to the fibromyalgia research and what this reflexive approach to analysis has meant in practice.

### **Reflective Practice and Reflexivity within Data Analysis**

As researchers, we have a duty to our research participants, the research questions and the wider public to stay true to the research, which is equated with attempting to best reproduce the embodied experience (Pink, 2015). If we are to achieve this recreation of experience, researchers need to engage in reflective practice. Reflective practice and reflexivity are not coherent, unified concepts, and within the realm of qualitative research, reflective practice and reflexivity are often conflated. Reflective practice is understood to mean "to look back over what has been done so as to extract the net meanings which are the capital stock of intelligent dealing with further experiences" (Dewey, 1938, p. 86). Reflexivity is often used to refer to the role of the researcher's positionality. In this sense, "to be reflective does not demand an 'other,' while to be reflexive demands both an other and some self-conscious awareness of the process of self-scrutiny" (Chiseri-Strater, 1996, p. 130). Research reports and publications relating to qualitative research in the social sciences often explore elements of positionality in relation to personal biases, experiences and pre-existing knowledge brought to the research. Through detailing and exemplifying such factors researchers seek to validate and objectivize their analyses and any potential influences on findings and outcomes, thus to make their research "at least quasi-objective" (Foley, 2002, p. 473). This is, however, problematic, as such a section on positionality does not necessarily make explicit the researcher's practical experience and application of reflection and reflexivity. The stages or phases of reflections and individual learning or recognition are not transparent, it is merely the researcher's final conclusion that is shared. Yet, if a researcher is truly committed to reflexivity and its "process of self-scrutiny" (Chiseri-Strater, 1996, p. 130), then the first stage of primary reflections needs to be shared and a second layer of thoughts, the reflections about reflections, be superimposed openly and explicitly.

In the practical reality of research, this is difficult. Reflections happen, but many processes of reflections may not be experienced consciously. They can happen on a subconscious, embodied level where as researchers we interpret speech pauses, non-verbal cues, changes in voice and intonation (Brown, 2018b). Reflexivity, in this sense, is in itself an analytical process that goes beyond the initial self-scrutiny. For, in order to allow for the embodied experience to enter the writings, the researcher needs to engage with initial reflections, meta-reflections and a third level of interpretative reflections. This third level of interpretative reflection is what Finlay (2003) describes as "self-reflective consciousness—at this most reflexive level, the self becomes the aim of reflection" (p. 109). Her definition of reflective practice and reflexivity is based upon hermeneutic and phenomenological principles,

and as such incorporates the interpretative dimension of reflection but also the lived experience of the researcher and the researched.

It is this particular kind of reflexivity or reflective practice that allows the researcher to manipulate raw data in order to achieve the aim of truthfully replicating experiences. In the case of her research about the experience of childbirth Chadwick (2017) decided to rearrange the original transcript into an “ethnopoetic style of transcription” (p. 61) to account for “the performative aspects of talk/telling” (p. 61), which in turn “encourages a re-enactment of the original telling by the reader/audience” (p. 61). As a consequence of the visual re-organizing and re-arranging of the individual speech acts, the reader’s focus is drawn to specific experiences and as such the transcript becomes a more truthful and true representation of the stories told by the research participants. What the researcher does here with and to the data, is a conscious decision of applying personal reflections to the analytical process. This means to follow a rigorous process of listening to the stories, seeking out the individual “I” voices and exploring discrepancies, discontinuities or contradictions (Chadwick, 2017). Ultimately, the researcher acknowledges here that data is not just language, but is indeed beyond, above and in between language and it requires a consideration of these “hot spots” (MacLure, 2011, p. 1003) and “gut feelings” (p. 1004) to do justice to the researched.

For this kind of analysis and consequently for research to remain valid and reliable, this creative analytical process can be enhanced through a participatory framework. Whilst the researcher develops tentative interpretations and manipulate data to create a relevant, truthful representation of a phenomenon under study, the input of the research participants and thus the researched provides considerable insights. Most commonly participatory elements within research relate to the data collection stage to smoothen the power differentials between the researcher and participants and to encourage the more vulnerable members of society to take part in research (Cornwall & Jewkes, 1995; Carter & Coyne, 2018). However, as participants are the experts of their experiences, their voices ought to be also included within the analysis stage (Nind, 2011). Through engaging participants within the analysis requires another layer of reflexivity, which brings us back to the process of self-scrutiny. Reflexivity is therefore not navel-gazing, but a conscious, interpretative process that links the researcher’s conscious choices to gut feelings throughout all stages of the research process. Analysis and write-up are therefore not mechanical stages within research, but creative processes that allow to engage with and in the data.

### **Reflexive Data Analysis in Practice**

In the context of my own research, I am concerned with positionality due to the fact that I have also been diagnosed with fibromyalgia. This supposedly makes me an insider researcher. However, due to the variability and uniqueness of the fibromyalgia illness experience I still remain very much an outsider to my research participants’ stories. I am acutely aware of the tensions around disclosing to the research participants and declare myself an insider, whilst at the same time maintaining an academic research persona instead of becoming “the fibromyalgia patient.”

At the same time, however, the physical experience of fibromyalgia cannot be excluded from the research process. I often feel pain or fatigue, bodily and embodied experiences, especially in response to environmental and contextual influences. This has led me to consider my positionality in relation to a wider range of bodily responses, such as “hearing voices” when reading interview transcripts or experiencing bodily fatigue and brain fog after an interview. Upon reflection, I realized how difficult it was for me to extract my researcher self from my fibromyalgia self. Data analysis of my research participants’ lived experiences became tainted by my own experiences of the fibromyalgia symptoms. Aiming to seek out and listen to the

strong “I” voices became more difficult, as my own “I” voice became louder. Bearing in mind my duty and responsibility towards my research participants and the truthful representation of their experiences, I decided to face the challenge head on and to approach data analysis from a strongly reflexive angle. I realized that I would need to connect the experiences of the researched with my experiences as an insider researcher.

My analytical approach to the data from the fibromyalgia research therefore took two different strands: on the one hand I used traditional coding through the software NVivo, but on the other hand, I applied a more untraditional approach to exploring the non-linear data. I took the conscious decision to engage in an analytical process that would combine active meaning-making with metaphorical representation, elements that I also rely on in my data collection. In the following, I outline two examples for how I approached this process by creating an illustrated poem and an installation.

### **Illustrated Poem: I need duvet days**

As a first stage, I watched back the video-recordings of conversations about the experience of fibromyalgia, while reading along the transcripts of those conversations. Rather than actively seeking out emerging themes or attempting to code in a traditional sense, I focused on the nature and tonality of speech. I let words, phrases and sentences speak to me trying to hone in on the “I” voices. In the course of this process, particular sections, phrases or words became “hot spots” to be followed up. I started to listen to and follow my gut feelings (MacLure, 2011). They were sections that differed from the individuals’ remaining speech patterns, either through increased emphases using changed tonal ranges or through voice patterns indicating heightened levels of emotions. Emotions conveyed were sadness, melancholy, but also upset and anger.

Reflecting back on the hot spots I realized that I needed to find a way of expressing these particular emotions through the original wordings and phrases used by the research participants. I re-read the transcripts again, trying to identify sections where emotions became particularly foregrounded. From these sections I extracted individual phrases and words, which I then copied into a new document. This new document contains extracts from conversations with five different participants, and yet, there are recurring themes of the broken body, the continuous experience of illness and the experience of progressive development of fibromyalgia. I subsequently rearranged the phrases to better connect and reinforce the themes. Through applying a range of fonts and font sizes I attempted to indicate tonality, but also the individuals whose speeches the sections were drawn from.

For my research, participants are required to respond to a series of questions by using objects in order to create an identity box (Brown, 2017; Brown, 2018a; Brown, 2018b). The objects used or described by the participants are in themselves powerful tools of expression. I therefore decided to draw on these metaphorical representations, which form part of my data collection, to add a second layer of creative analysis to the description of experiences with fibromyalgia. Through their particular objects, participants described fibromyalgia: as long-known, comfortable but unwanted and annoying, as a burden and hindrance, but as impossible to get rid of. Participants used the metaphors of a grey T-shirt or an old backbag to emphasize this experience.

In order to capture this multitude of descriptions, I chose to use a shattered mug. The brokenness represents the broken body, but at the same time the mug also stands for the attachment we have to special objects that we feel we cannot throw away, although they no longer fulfil their original purpose.





**Figure: I need duvet days**

By the end of the process, this illustrated poem had become a helpful tool for me to make sense of participants' experiences, whilst at the same time participants felt that they were able to demonstrate and show their feelings. However, they felt that the illustrated poem required a certain pre-understanding in order to be able to fully comprehend its meaning. I therefore sought to explore a different approach to analysis and created the art installation *Peace Treaty*, which participants felt allowed for better engagement with life with fibromyalgia for those who do not have any prior knowledge.

### **Installation: Peace Treaty**

The approach to the creation of the installation was slightly different to the approach to the illustrated poem. Whilst both aimed for a representation of experiences, the art installation also aimed at providing information about the lived experiences of fibromyalgia.

As a first step, I read the transcripts of conversations and email correspondences in relation to the experience of fibromyalgia symptoms. I combined this reading with the consideration of the photographs sent to me in response to the identity box project (Brown, 2017; Brown, 2018a; Brown, 2018b). Based on the participants' responses I created an artistic representation through assemblage. In artistic terms assemblages are collections of items that are specifically arranged to convey the artist's message. However, assemblages are also found as a research strategy if understood as constellations in Deleuzoguattarian terms. In this context, the constellation or assemblage is the arrangement, integration or combination of a variety of concepts, theories and component parts. As a research framework, the assemblage allows for an interpretation of the basic components, which eventually lead into the

consideration of relationships and connections. These, in turn, are not stable and fixed, but are fluid, variable and moveable (Deleuze & Guattari, 2016).

To me, the approach to assemblage therefore worked on two levels: artistically and philosophically, whereby I do not see these as mutually exclusive. The materiality of the installation and the representation of lived experience and feelings helped me identify a new form of domesticity in the context of a chronically ill and disabled person; a person, whose physical condition confines him/her to the living room instead of a workplace. In this sense, through the means of arts, the installation sought to inform, teach, raise awareness, develop empathy and understanding and thus to have a long-lasting effect on viewers. Assembling the particular objects with an explanation for their relevance helped me to distance myself from my personal experiences.

What is interesting to note though, is that I was able to combine the objects and representations provided by the research participants with a poem that I myself had written some time ago. As such, the creation of the installation echoed Chadwick's (2017) philosophy of ethnopoetic transcriptions in that they both highlight discrepancies, in this case discrepancies between individuals' experiences. In terms of the installation, the discordances are particularly manifest in the use of the ice pack alongside the hot water bottle. I personally would never use ice packs to help alleviate symptoms. And yet, the synthesis of experiences of the researched and the researcher required the inclusion of the contradictory pain management aids.

Once the installation was completed, I realized that the boundaries between my own experiences and those of the participants had become blurred in the Deleuzoguattarian interpretation of fluidity and movement. And yet, this process still allowed me to consider all elements as "quasi-objective" (Foley, 2002, p. 473).



**Figure: Installation – Peace Treaty**

The outcome of the installation is newly created knowledge that seeks to foster empathy and to deepen the understanding of lived experiences with fibromyalgia on the part of the audience, which would not have been possible without the reflective and reflexive activities.

### **Discussion and Concluding Thoughts**

Within the recent discourses of qualitative research there has been a significant shift towards the recognition of the researcher's positionality, role and responsibility especially where data analysis, the representation and dissemination of research outcomes are concerned. Methodological treatises of how to think sociologically (Bauman & May, 2001), qualitatively (Saldaña, 2015) or ethnographically (Atkinson, 2017) have opened qualitative research up for new avenues regarding data analysis processes. Instead of asking researchers to identify with and apply a specific framework in their research approach, there is now a heightened focus on exploring the width and breadth of human understanding and interaction.

On the other hand, the introduction of imagination and creativity within ethnography (Elliott & Culhane, 2016), the creative turn in qualitative research (Kara, 2015) and a more invested interest in embodied and sensory research practices (Pink, 2015) also play a significant role in reshaping the way we think about data analysis. Firstly, this is because the data itself becomes more unconventional, unlinear, "messy" due to the introduction of the greater variety of formats accessible to researchers and participants. Secondly, researchers increasingly realize that attempting to translate photographs and collages or sensory interview-walks into linear, textual outputs does not fully do justice to the research or the participants.

We are starting to recognize that themes do not "emerge" from data in a vacuum but are shaped by social-constructivist conventions. This means that any form of data analysis is an interpretation. As such the format of the data does not matter, because researchers will interpret the transcript and written word from their specific vantage point, just like they would interpret music or poetry. As researchers, we are asked to listen to our gut, follow our instincts and pursue the line of inquiry that seems most befitting the research and its data.

So, what exactly happened through this reflexive approach to data analysis, and which steps needed to be taken in order for the outcomes to be relevant and meaningful for the researcher, the research and the researched? It is evident that the approach described here borrows heavily from the arts. Indeed, there is an entire research culture around arts-based research practice, which considers the art form as research (Leavy, 2015). This specific research practice relies on the arts to engage, convey emotions, conjure up empathy whilst recognizing that human understanding and knowing are pre-verbal, multimodal, embodied. Through the conscious manipulation, assembly and reassembly (Deleuze & Guattari, 2016; Denzin, 2016) of raw data the researcher aims

to offer new insights and learning; to describe, explore, discover, problem-solve; to forge micro-macro connections; to engage holistically; to be evocative and provocative; through critical consciousness to raise awareness and empathy; to unsettle stereotypes, challenge dominant ideologies and to include marginalized voices and perspectives; to be participatory; to promote dialogue; to get at multiple meanings; and to open up avenues for public scholarship, usefulness and social justice. (Leavy, 2015, pp. 21-27)

In practice, there is no one right way to go about this particular kind of analysis. What emerges, however, is a special closeness to the data. This closeness to the data does not necessarily relate to the researcher being an insider-researcher. It merely means that as researchers we need to be ready to engage with the data to such an extent that we can empathize, imagine and recreate

experiences that are told to us. At the same time, we need to be ready to hand ourselves over to what the data tells us. Generally speaking, there are interpretations that are open to us due to our common understanding of human communication and socialization, but of course, there are also alternative interpretations possible, given the contextualization of the communication. This should not be seen as a limitation to the method, but an opportunity to develop several strands to analysis.

One significant consequence of that is, that researchers need to become more conversant in a greater variety of analytical frameworks to enhance their interpretative skills. Analyzing a poem, for example, requires some knowledge regarding its formal structure and poetic devices. Similarly, the physical arrangement of objects in the identity box project, or the positioning of individual items within a photo-collage must also be considered. Alongside these structural, organizational characteristics, researchers need to identify the specific meanings of objects and items within the context of the participants' socio-cultural and socio-economic environment. Only then, finally, can researchers bring together all these elements to create meaningful representations or recreate experiences. As such, the researcher truly is a bricoleur, "a trickster, a person who is a jack-of-all-trades, a person who can fix things with the materials that are at hand" (Denzin, 2016, p. 36).

It is this seemingly random approach to data that could make this kind of analysis seem unscientific. However, the above-mentioned concerns are outweighed by the benefits that this approach brings. First of all, there is an additional new level of analysis, as the forms of communication are considered more consistently. Additionally, through engaging with data in the way described here to create a new artistic outcome such as a poem or an installation, new insights are possible and new knowledge is generated. This may then be considered as yet another stage of making meaning of the data, which in turn can be analyzed. The process of data analysis becomes a truly iterative spiral leading deeper and deeper into meaning. And finally, in an era where public engagement and social activism are closely linked to and connected with qualitative research, this kind of analysis provides new impetus for communication beyond the academic communities and for purposes other than mere academic publications.

In reality, taking this intentional stance of listening to our guts and identifying what grabs us as researchers means that we are more honest to ourselves, our participants and those who read our research reports, as themes do not emerge but are constructed anyway. And through engaging more openly with our roles and positions within and in connection to our research topics we are able to create a reflexive foundation for the systematic analysis of data.

## References

- Armentor, J. L. (2017). Living with a contested, stigmatized illness: Experiences of managing relationships among women with fibromyalgia. *Qualitative Health Research*, 27(4), 462-473.
- Atkinson, P. (1997). Narrative turn or blind alley? *Qualitative Health Research*, 7(3), 325-344.
- Atkinson, P. (2017). *Thinking ethnographically*. Thousand Oaks, CA: Sage.
- Bagnoli, A. (2009). Beyond the standard interview: the use of graphic elicitation and arts-based methods. *Qualitative Research*, 9(5), 547-570.
- Bauman, Z., & May, T. (2001). *Thinking sociologically* (2<sup>nd</sup> ed.). Hoboken, NJ: Blackwell Publishing Ltd.
- Brinkmann, S., & Kvale, S. (2015). *InterViews: Learning the craft of qualitative research interviewing* (3<sup>rd</sup> ed.). Thousand Oaks CA: SAGE Publications.
- Brown, N. (2017). The construction of academic identity under the influence of fibromyalgia. In H. Henderson, A. L. Pennant, & M. Hand, (Eds.). *Papers from the Education*

- Doctoral Research Conference Saturday 26 November 2016. School of Education. Birmingham: University of Birmingham. pp. 18-25. Retrieved from [http://epapers.bham.ac.uk/2979/1/Full\\_Book\\_Research\\_conference\\_November\\_2016.pdf](http://epapers.bham.ac.uk/2979/1/Full_Book_Research_conference_November_2016.pdf)*
- Brown, N. (2018a). Exploring the lived experience of fibromyalgia using creative data collection. *Cogent Social Sciences*, 4(1). doi: [10.1080/23311886.2018.1447759](https://doi.org/10.1080/23311886.2018.1447759)
- Brown, N. (2018b). Video-conference interviews: Ethical and methodological concerns in the context of health research. *SAGE Research Methods Cases*. <http://dx.doi.org/10.4135/9781526441812>
- Carter, B., & Coyne, I. (2018). Participatory research: Does it genuinely extend the sphere of children's and young people's participation? In I. Coyne & B. Carter (Eds.), *Being participatory: Researching with children and young people* (pp. 171-178). Cham, Switzerland: Springer.
- Chadwick, R. (2017). Embodied methodologies: challenges, reflections and strategies. *Qualitative Research*, 17(1), 54-74.
- Chiseri-Strater, E. (1996). Turning in upon ourselves: Positionality, subjectivity, and reflexivity in case study and ethnographic research. In P. Mortensen & G. E. Kirsch (Eds.), *Ethics and representation in qualitative studies of literacy* (pp. 115-133). Urbana: NCTE.
- Cording, M., Moore, R. A., Derry, S., & Wiffen, P. J. (2015). Pregabalin for pain in fibromyalgia in adults. *Cochrane Database of Systematic Reviews*, 7. Article ID: CD011790. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD011790/full>
- Cornwall, A., & Jewkes, R. (1995). What is participatory research? *Social Science & Medicine*, 41(12), 1667-1676.
- Dahlberg, K., Dahlberg, H., & Nyström, M. (2011). *Reflective lifeworld research* (2<sup>nd</sup> ed.). Lund, Sweden: Studentlitteratur.
- Deleuze, G., & Guattari, F. (2016). *A thousand plateaus*. London, UK: Bloomsbury.
- Denzin, N. K. (2016). *The qualitative manifesto: A call to arms*. New York, NY: Routledge.
- Dewey, J. (1938). *Experience and Education*. New York: Collier Books.
- Eccleston, C. (2016). *Embodied: The psychology of physical sensation*. Oxford, UK: Oxford University Press.
- Ehrlich, G. E. (2003). Fibromyalgia is not a diagnosis: Comment on the editorial by Crofford and Clauw. *Arthritis and Rheumatism*, 48(1), 276.
- Elliott, D., & Culhane, D. (Eds.). (2016). *A different kind of ethnography: Imaginative practices and creative methodologies*. Toronto, Canada: University of Toronto Press.
- Finlay, L. (2003). Through the looking glass: Intersubjectivity and hermeneutic reflection. In L. Finlay & B. Gough (Eds.), *Reflexivity: A practical guide for researchers in health and social sciences* (pp. 105-119). Oxford: Blackwell Science Ltd.
- Fletcher, C., Booth, G., & Ryan, S. J. (2015). A new diagnosis of fibromyalgia: A qualitative exploration into quality of life. *Physiotherapy*, 101, e390-e391.
- Foley, D. E. (2002). Critical ethnography: The reflexive turn. *International Journal of Qualitative Studies in Education*, 15(4), 469-490.
- Gunzenhauser, M. G. (2006). A moral epistemology of knowing subjects: Theorizing a relational turn for qualitative research. *Qualitative Inquiry*, 12(3), 621-647.
- Henriksson, C. M., Liedberg, G. M., & Gerdle, B. (2005). Women with fibromyalgia: Work and rehabilitation. *Disability and Rehabilitation*, 27(12), 685-694.
- Henriksson, C., & Liedberg, G. (2000). Factors of importance for work disability in women with fibromyalgia. *Journal of Rheumatology*, 27(5), 1271-1276.
- Husserl, E. (1960). *Cartesian meditations: An introduction to phenomenology*. Berlin,

- Germany: Springer Science & Business Media.
- Jewitt, C., Bezemer, J., & O'Halloran, K. (2016). *Introducing multimodality*. New York, NY: Routledge.
- Kara, H. (2015). *Creative research methods in the social sciences: A practical guide*. Bristol, UK: Policy Press.
- Leavy, P. (2015). *Method meets art: Arts-based research practice* (2<sup>nd</sup> ed.). New York, NY: Guilford Publications.
- MacLure, M. (2011). Qualitative inquiry: Where are the ruins? *Qualitative Inquiry*, 17(10), 997-1005.
- Mason, J., & Davies, K. (2009). Coming to our senses? A critical approach to sensory methodology. *Qualitative Research*, 9(5), 587-603.
- McMahon, L., Murray, C., & Simpson, J. (2012). The potential benefits of applying a narrative analytic approach for understanding the experience of fibromyalgia: A review. *Disability and Rehabilitation*, 34(13), 1121-1130.
- Morgan, D. L. (2018). Themes, theories, and models. *Qualitative Health Research*, 28(3), 339-345.
- Nind, M. (2011). Participatory data analysis: a step too far? *Qualitative Research*, 11(4), 349-363.
- Nind, M., & Vinha, H. (2016). Creative interactions with data: using visual and metaphorical devices in repeated focus groups. *Qualitative Research* 16(1), 9-26.
- Orr, N., & Phoenix, C. (2015). Photographing physical activity: Using visual methods to "grasp at" the sensual experiences of the ageing body. *Qualitative Research* 15(4): 454-472.
- Pink, S. (2015). *Doing sensory ethnography*. (2<sup>nd</sup> ed.). London, UK: SAGE.
- Saldaña, J. (2015). *Thinking qualitatively: Methods of mind*. Thousand Oaks, CA: Sage.
- Saldaña, J. (2016). *The coding manual for qualitative researchers* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.
- Saldaña, J., & Omasta, M. (2017). *Qualitative research: Analyzing life*. Thousand Oaks, CA: Sage.
- Sallinen, M., Kukkurainen, M. L., & Peltokallio, L. (2011). Finally heard, believed and accepted—Peer support in the narratives of women with fibromyalgia. *Patient Education and Counseling*, 85(2), e126-e130.
- Scarry, E. (1985). *The body in pain: The making and unmaking of the world*. Oxford, UK: Oxford University Press.
- Silverman, D. (2013). *Doing qualitative research: A practical handbook*. Thousand Oaks, CA: SAGE Publications Limited.
- Sontag, S. (2003). *Regarding the pain of others*. London, UK: Penguin Books.
- Tarr, J., Gonzalez-Polledo, E., & Cornish, F. (2018). On liveness: using arts workshops as a research method. *Qualitative Research*, 18(1), 36-52.
- Vincent, A., Whipple, M. O., & Rhudy, L. M. (2016). Fibromyalgia flares: A qualitative analysis. *Pain Medicine*, 17(3), 463-468.
- White, K., & Harth, M. (2001). Classification, epidemiology, and natural history of fibromyalgia. *Current Pain and Headache Reports*, 5, 320-329.
- Wolfe, F. (2009). Fibromyalgia wars. *The Journal of Rheumatology*, 36, 671-678.
- Yunus, M. B. (2008). Central sensitivity syndromes: A new paradigm and group nosology for fibromyalgia and overlapping conditions, and the related issue of disease versus illness. *Seminars in Arthritis and Rheumatism*, 37(6), 339-352.
- Yunus, M. B. (2009). Central sensitivity syndromes. *Journal of Musculoskeletal Pain*, 17(4), 400-408.

### Author Note

Nicole Brown is Lecturer in Education at the UCL Institute of Education and a doctoral researcher at the University of Kent. Her research interests lie with advancing learning and teaching and ways of improving the generation of knowledge. She therefore investigates creative and innovative research methodologies. Correspondence regarding this article can be addressed directly to: [nicole.brown@ucl.ac.uk](mailto:nicole.brown@ucl.ac.uk).

Copyright 2019: Nicole Brown and Nova Southeastern University.

### Article Citation

Brown, N. (2019). "Listen to your gut": A reflexive approach to data analysis. *The Qualitative Report*, 24(13), 31-43. Retrieved from <https://nsuworks.nova.edu/tqr/vol24/iss13/4>

---